

CLAIMS

1. An aqueous cosmetic composition containing, in a cosmetically acceptable medium, at least one type of polymer compound whose chain
 - 5 comprises at least two types of amine units -NH- and/or $\overset{|}{\text{N}}-$ and is devoid of any vinyl amine or vinyl amide unit, said polymer compound being modified with one or more hydrophilic and/or hydrophobic hydrocarbon segments, said segment(s) being different from sugar and being devoid of any sulfur, silicone or amidino group, wherein the
 - 10 modification with hydrophobic hydrocarbon segments is not carried out by means of a bifunctional spacer group.
 2. A composition according to claim 1, characterized in that the polymer compound(s) is or are selected from:
 - polyalkyleneimines, preferably poly((C₂-C₅)alkyleneimines),
 - 15 - polymers that are grafted by a (C₂-C₅) alkyleneimine, preferably polymers that are grafted by an ethyleneimine, more preferably polyamidoamines, crosslinked or not, grafted by the ethyleneimine,
 - copolymers based on amino (C₁-C₄) alkyl (meth)acrylate, preferably based on aminoethyl(meth)acrylate,
 - 20 - polyallylamines,
 - polycondensates of at least one compound selected from piperazine, 1-(2-aminoethyl)piperazine, 1,4-bis(3-aminopropyl)piperazine), 1-(C₁-C₂₅) alkyl piperazine, 1,4-di((C₁-C₂₅)alkyl) piperazine, 1-(2-hydroxy((C₂-C₂₅)alkyl)) piperazine, imidazole, C₁-C₂₅
 - 25 alkylimidazole, or combinations thereof, with at least one compound selected from a C₆-C₂₂ alkylene dihalide, an epihalohydrine and/or a C₈-C₂₂ bisepoxide,
 - polymers containing at least 2 units of one or more basic amino acids, and
 - 30 - dendrimers containing end-positioned primary amines.
 3. A composition according to claim 2, characterized in that basic amino acid(s) is or are selected from ornithin, asparagine, glutamine, lysine and arginine.

4. A composition according to anyone of preceding claims, characterized in that the polymer compound(s) is or are linear, branched, hyper-branched or dendrimeric.

5. A composition according to anyone of preceding claims, characterized in that the hydrophilic segment(s) is or are selected from:

- segments of polyhydroxylated compounds, preferably polyalkylene glycol or polyvinyl alcohol segments, and
- segments of polycarboxylated compounds.

6. A composition according to claim 5, characterized in that the polyalkylene glycol segments are selected from polyethylene glycol or polypropylene glycol segments.

7. A composition according to anyone of preceding claims, characterized in that the hydrophobic segment(s) is or are selected from fatty acid carbon chains.

8. A composition according to claim 7, characterized in that the fatty acid carbon chains are selected from C₁₀-C₅₀ alkyl radicals, C₁₀-C₅₀ hydroxyalkyl radicals, C₁₀-C₅₀ carboxyalkyl radicals, ((C₁-C₁₀) alkoxy)carbonyl ((C₁₀-C₅₀) alkyl) radicals, C₁₂-C₅₀ fatty acid esters.

9. A composition according to anyone of preceding claims, characterized in that the hydrophobic and/or hydrophilic segment(s) is or are grafted onto the polymer compound(s) or sequenced with the amine units.

10. A composition according to anyone of preceding claims, characterized in that the modified polymer compound(s) is or are selected from polyethyleneimine-polyethylene glycol, polyethyleneimine-polyvinyl alcohol, polyallylamine-polyethylene glycol, polyallylamine-polyvinyl alcohol, polylysine-polyethylene glycol and polylysine-polyvinyl alcohol.

11. A composition according to anyone of preceding claims, characterized in that the modified polymer compound(s) represent(s) from 0.01 to 40%, preferably from 0.1 to 20%, more preferably from 1 to 10%, by weight as related to the composition total weight.

12. A composition according to anyone of preceding claims, characterized in that it comprises at least one cosmetic active agent selected from conditioning agents and styling agents.

13. A composition according to claim 12, characterized in that the conditioning agent(s) is or are selected from cationic polymers, volatile or non volatile, linear or cyclic silicones, and silicone derivatives.

5 14. A composition according to claim 12, characterized in that the styling agent(s) is or are selected from anionic, non ionic or amphoteric polymers.

15. A composition according to anyone of claims 11 to 13, characterized in that the conditioning agent(s) and/or the styling agent(s) represent from 0.01 to 40%, preferably from 0.1 to 20%, by weight as
10 related to the composition total weight.

16. A composition according to anyone of preceding claims, characterized in that it comprises in addition at least one cosmetic active agent selected from gelling agents and/or inorganic or organic, associative or non associative thickening agents, anionic, non ionic,
15 cationic or amphoteric surfactants, propenetrating agents, emulsifying agents, fragrances, preservatives, fillers, sunscreens, coloring agents, proteins, vitamins, provitamins, moisturizing agents, emollients, softening agents, mineral, vegetal or synthetic oils, hydrophilic or lipophilic active agents such as ceramides and pseudoceramides, antifoaming agents,
20 antiperspirants, free radical scavengers, bactericides, and anti-dandruff agents.

17. A composition according to anyone of preceding claims, characterized in that it comprises at least one solvent selected from water, C₂-C₆ alcohols, C₂-C₆ ethers, C₂-C₆ esters, N-methylpyrrolidone (NMP), C₃-C₆ ketones, polyols, and polyol ethers or esters.
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18. Use for providing softness to the hair, of a cosmetic composition that contains, in a cosmetically acceptable medium, at least one type of polymer compound whose chain comprises at least two types of amine units -NH- and/or $\text{--}\overset{\text{I}}{\text{N}}\text{--}$ and is devoid of any vinyl amine or vinyl
30 amide unit, said polymer compound being modified with one or more hydrophilic and/or hydrophobic hydrocarbon segments, said segment(s) being devoid of any sulfur, silicone or amidino group.

19. Use according to claim 18, characterized in that the hydrophilic segment(s) is or are not sugars.

20. Use as a cosmetic active agent evenly distributing onto the hair, of a polymer compound which chain comprises at least two amine units -NH- and/or $\text{-}\overset{\text{I}}{\text{N}}\text{-}$, said polymer compound being modified with one or more hydrophilic and/or hydrophobic hydrocarbon segments.

5 21. Use for improving the deposition homogeneity of at least one cosmetic active agent onto the keratinic materials, of a cosmetic composition that contains, in a cosmetically acceptable medium, at least one type of polymer compound whose chain comprises at least two types of amine units -NH- and/or $\text{-}\overset{\text{I}}{\text{N}}\text{-}$, said polymer compound being modified
10 with one or more hydrophilic and/or hydrophobic hydrocarbon segments.

22. Use according to claim 21, characterized in that the cosmetic active agent is included in the cosmetic composition or is applied onto the keratinic materials once the composition has been applied.

23. Use according to claim 21 or 22, characterized in that the
15 cosmetic active agent is selected from conditioning agents and styling agents.

24. Use according to claim 23, characterized in that conditioning agents are selected from cationic polymers, volatile or non volatile, linear or cyclic silicones, and silicone derivatives.

20 25. Use according to claim 23, characterized in that the styling agents are selected from anionic, non ionic or amphoteric polymers.

26. Use according to claim 21 or 22, characterized in that the cosmetic active agent is selected from gelling agents and/or inorganic or organic, associative or non associative thickening agents, anionic, non
25 ionic, cationic or amphoteric surfactants, propenetrating agents, emulsifying agents, fragrances, preservatives, fillers, sunscreens, coloring agents, proteins, vitamins, provitamins, moisturizing agents, emollients, softening agents, mineral, vegetal or synthetic oils, hydrophilic or lipophilic active agents such as ceramides and pseudoceramides,
30 antifoaming agents, antiperspirants, free radical scavengers, bactericides, and anti-dandruff agents.

27. Use according to anyone of claims 18 to 26, characterized in that the polymer compound(s) is or are selected from:

- polyalkyleneimines, preferably poly((C₂-C₅)alkyleneimines),

- polymers that are grafted by a (C₂-C₅) alkyleneimine, preferably polymers that are grafted by the ethyleneimine, more preferably polyamidoamines, crosslinked or not, grafted by the ethyleneimine,
 - copolymers based on amino (C₁-C₄) alkyl(meth)acrylate,
 - 5 preferably based on aminoethyl(meth)acrylate,
 - polyallylamines,
 - polycondensates of at least one compound selected from piperazine, 1-(2-aminoethyl)piperazine, 1,4-bis(3-aminopropyl)piperazine), 1-(C₁-C₂₅) alkyl piperazine, 1,4-di((C₁-C₂₅) alkyl) piperazine,
 - 10 1-(2-hydroxy((C₂-C₂₅)alkyl)) piperazine, imidazole, C₁-C₂₅ alkylimidazole, or combinations thereof, with at least one compound selected from a C₆-C₂₂ alkylene dihalide, an epihalohydrine and/or a C₈-C₂₂ bisepoxide,
 - polymers containing at least 2 units of one or more basic amino
 - 15 acids, and
 - dendrimers containing primary amines, preferably polyethyleneimine and polypropyleneimine dendrimers.
28. Use according to claim 27, characterized in that the basic amino acid(s) is or are selected from ornithin, asparagine, glutamine,
- 20 lysine and arginine.
29. Use according to anyone of claims 18 to 28, characterized in that the polymer compound(s) is or are linear, branched, hyper-branched or dendrimeric.
30. Use according to anyone of claims 18 to 29, characterized in
- 25 that the hydrophilic segment(s) is or are selected from:
- segments of polyhydroxylated compounds, preferably polyalkylene glycol or polyvinyl alcohol segments, and
 - segments of polycarboxylated compounds.
31. Use according to claim 30, characterized in that polyalkylene
- 30 glycol segments are selected from polyethylene glycol or polypropylene glycol segments.
32. Use according to anyone of claims 18 to 31, characterized in that the hydrophobic segments are selected from fatty carbon chains.

33. Use according to claim 32, characterized in that fatty carbon chains are selected from C₁₂-C₅₀ fatty alcohols, C₁₂-C₅₀ fatty acids, C₁₂-C₅₀ fatty acid esters.

5 34. Use according to anyone of claims 18 to 33, characterized in that the hydrophobic and/or hydrophilic segments are grafted onto the polymer compound(s) or sequenced with the amine units.

35. Use according to anyone of preceding claims, characterized in that the modified polymer compound(s) is or are selected from
10 polyethyleneimine-polyethylene glycol, polyethyleneimine-polyvinyl alcohol, polyallylamine-polyethylene glycol, polyallylamine-polyvinyl alcohol, polylysine-polyethylene glycol and polylysine-polyvinyl alcohol.